

# 1 Ohm ESD-Target

## 1 Introduction

The TBESDT2 ESD-Target is a current sensing transducer to verify ESD-Simulators. It is used to take measurements compliant with IEC 61000-4-2 up to 4 GHz.



Picture 1: TBESDT2 ESD-Target

## 2 Specification

|                        |                                                                                                                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compliance:            | IEC 61000-4-2                                                                                                                                                                                                     |
| Resistance:            | $1 \Omega \pm 1\%$                                                                                                                                                                                                |
| Transfer impedance:    | $1 \text{ V/A}$<br>$0.1 \text{ V/A}$ with 20 dB attenuator                                                                                                                                                        |
| Frequency range:       | DC – 4 GHz                                                                                                                                                                                                        |
| S21 flatness           | $< \pm 0.5 \text{ dB}$ up to 1 GHz<br>$< \pm 1.2 \text{ dB}$ up to 4 GHz                                                                                                                                          |
| Max. pulse amplitude:  | $\pm 30 \text{ kV}$                                                                                                                                                                                               |
| Deliverables:          | TBESDT2 ESD-Target<br>20 dB attenuator<br>N-Male to SMA-Male coaxial cable, 100 cm, RM141<br>SMA-Female to BNC-Male coaxial adapter<br>Aluminium carrying case<br>Factory calibration certificate, NIST traceable |
| ESD-Target weight:     | 0,5 kg                                                                                                                                                                                                            |
| ESD-Target dimensions: | D70 mm x H40 mm                                                                                                                                                                                                   |
| Case weight:           | 2.1 kg                                                                                                                                                                                                            |
| Case dimensions:       | 340 mm x 260 mm x 110 mm                                                                                                                                                                                          |

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### 3 ESD Target Insertion loss

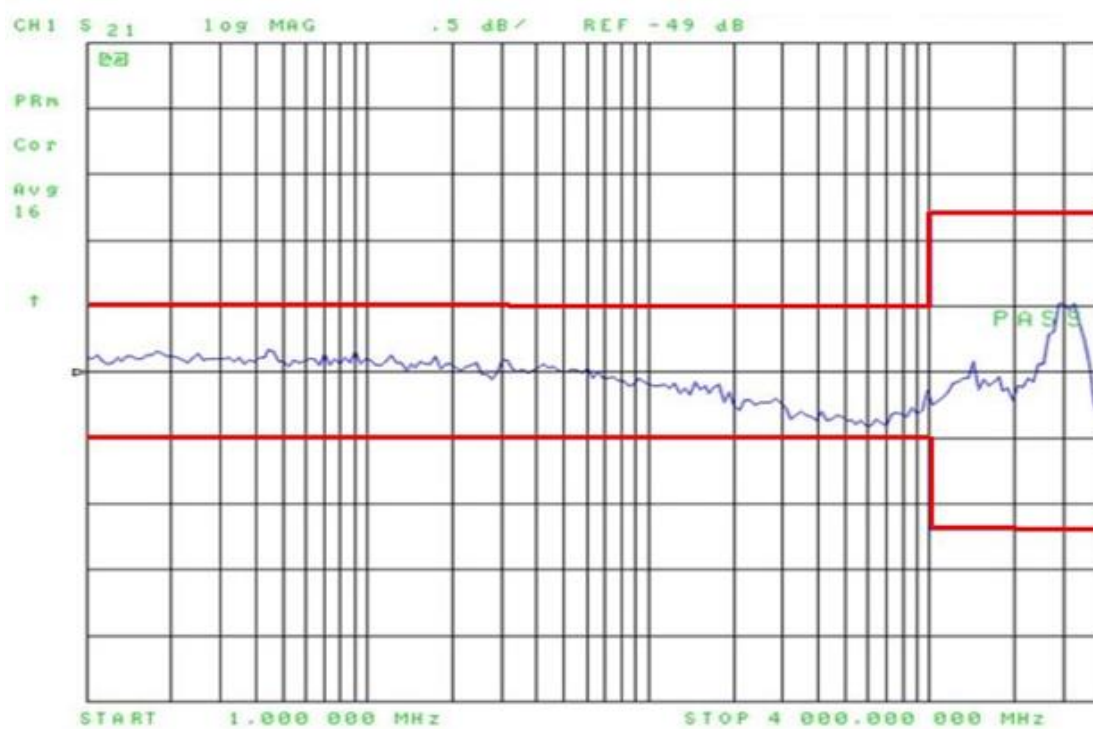


Figure 1: typical insertion loss; TBESDT2 ESD target + 20 dB attenuator + coaxial cable

### 4 Ordering Information

| Part Number | Description                                                                                                                                                                     |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TBESDT2     | 1 Ohm ESD-Target; 20 dB attenuator; N-M to SMA-M coaxial cable, 100 cm, RM141; SMA-Female to BNC-Male coaxial adapter; Aluminium carrying case, factory calibration certificate |

### 5 Optional Accessories

| Part Number | Description                                                                                              |
|-------------|----------------------------------------------------------------------------------------------------------|
| TBESDTA1    | ESD-Target adapter line for the verification of ESD-Targets; wooden box, factory calibration certificate |

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### 6 History

| Version | Date      | Author     | Changes  |
|---------|-----------|------------|----------|
| V 1.0   | 31.1.2024 | Mayerhofer | Creation |

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